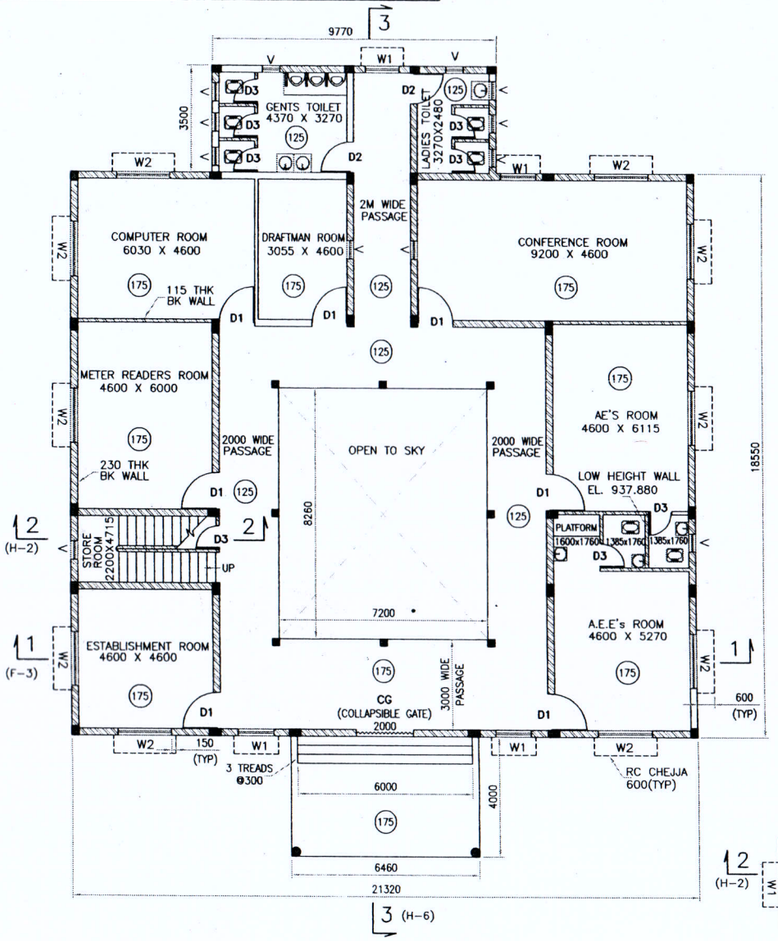
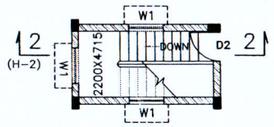
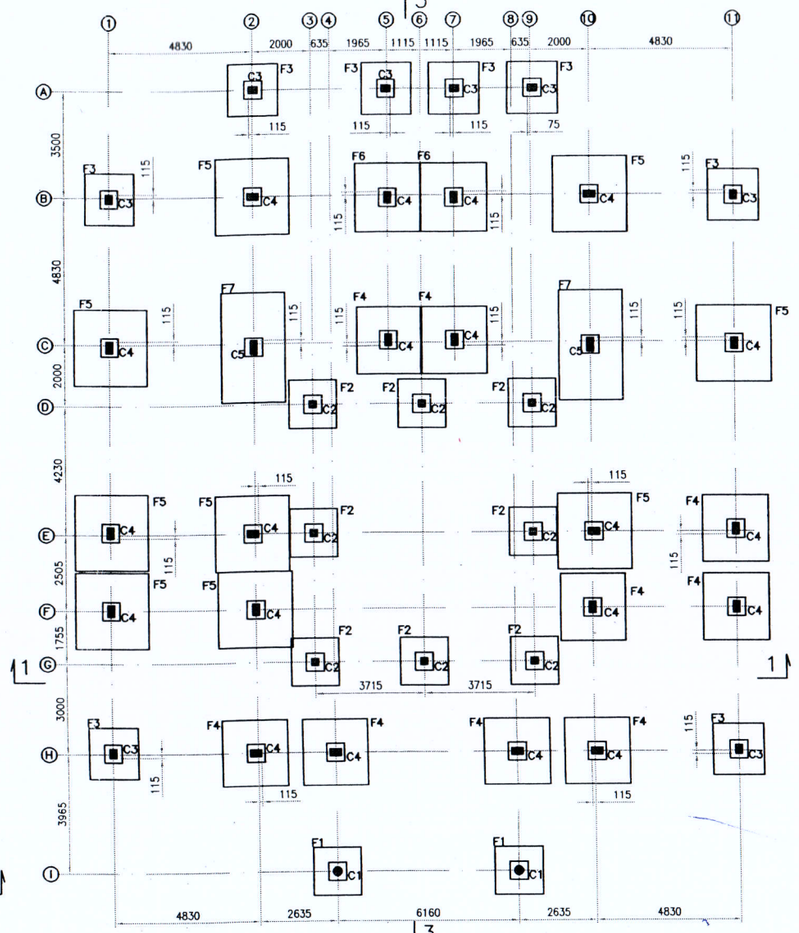


ARCHITECTURAL PLAN
SCALE 1:100



PLAN OF STAIRCASE OVERHEAD ROOM
SCALE 1:100



COLUMN LAYOUT
SCALE 1:100

LEGEND

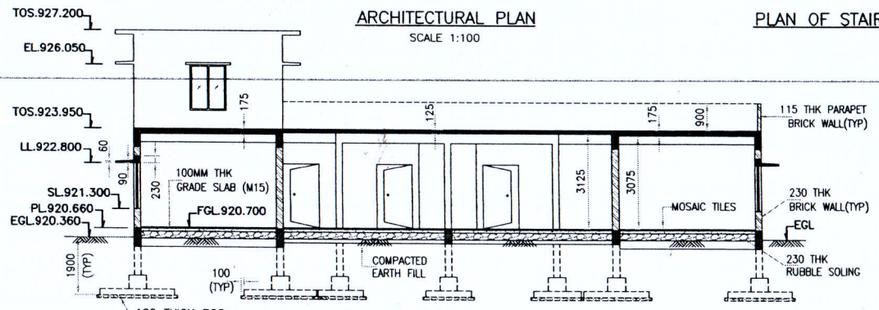
TYP	TYPICAL	LVL	LEVEL
FGL	FINISHED GROUND LEVEL	EGL	EXISTING GROUND LEVEL
DIA	DIAMETER	TOS	TOP OF SLAB
PCC	PLAIN CEMENT CONCRETE	LL	LINTEL LEVEL
EL	ELEVATION	PL	PLINTH LEVEL
THK	THICK	SL	SILL LEVEL
		RC	REINFORCED CONCRETE

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO UNPLASTERED MASONRY AND CONCRETE AND NOT TO PLASTER OR FLOOR FINISH UNLESS NOTED
3. CEMENT MORTAR FOR BRICK MASONRY WORK SHALL BE
   A) 1:5 FOR RAMP AND STEPS
   B) 1:4 FOR 115 THK BRICK WALLS AND 1:5 FOR 230THK BRICK WALLS
4. EXTERNAL PLASTER SHALL BE SAND FACED CEMENT PLASTER OF COMPOSITION 1:4 IN TWO COATS.
   A) 14mm THICK SCRATCH COAT.
   B) 6 mm THICK FINISH COAT.
5. INTERNAL PLASTER SHALL BE PLAIN FACED CEMENT PLASTER 12mm THICK FOR WALLS & COLUMNS WITH LIME FINISH (COMPOSITION 1:4)
6. FLOOR LEVEL IN BATH SHALL BE 25 MM BELOW THE GENERAL LEVEL AND SHALL BE SLOPED FOR FLOOR DRAINAGE.
7. ALL FREE EDGES OF CHAJJAS & SLAB PROJECTIONS SHALL HAVE DRIP MOULD IN PLASTER 20 MM WIDE AND 10 MM DEEP.
8. PLINTH PROTECTION AROUND BUILDINGS TO BE 100 THK & 1000 WIDE IN-SITU PCC(1:2:4) ON SAND FILL.
9. ALL CONCRETE SHALL BE OF GRADE M20 UNLESS NOTED
10. REINFORCEMENT SHALL BE Fe 415 TMT DESCRIBED AS 'T' BARS
11. CLEAR COVER TO MAIN REINFORCEMENT UNLESS NOTED SHALL BE AS FOLLOWS:
    FOOTING ..... 50mm TOP AND SIDES, 75mm BOTTOM
    COLUMNS ..... 40mm ALL SIDES
    SLABS ..... 20mm TOP AND BOTTOM
    BEAMS ..... 40mm ALL SIDES
    GRADE SLAB 50mm
12. PCC SHALL BE OF GRADE M10 UNLESS NOTED.
13. MAXIMUM AGGREGATE SIZE IN CONCRETE TO BE 20mm.
14. REINFORCEMENT WHERE SPLICED SHALL HAVE LAP OF 50XBAR DIAMETER OF SMALLER BAR. LAPS SHALL BE STAGGERED.

ENGINEERING REFERENCE DRAWINGS
NIL

CONSTRUCTION REFERENCE DRAWINGS
OMBR CLEAR WATER RESERVOIR
PLOT PLAN ..... NMT/BWSSP(II)/W6b/GA/4001
REINFORCEMENT DETAILS ..... NMT/BWSSP(II)/W6b/ST/4060



SECTION 1–1 (D-1)
(SCALE 1:100)

SCHEDULE OF OPENINGS

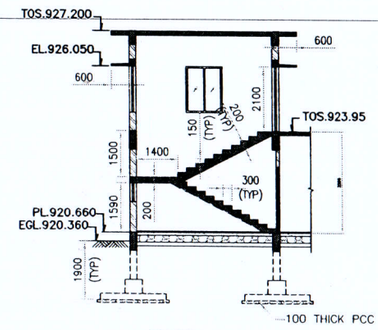
SR.NO	TYPE	OPENING	Nos	DESCRIPTION
1	CG	2000 X 2400	1	M.S COLLAPSIBLE GATE
2	D1	1200 X 2100	7	PRESSED STEEL FRAME & 35 THICK SOLID CORE FLUSHED DOOR WITH VISION PANEL.
3	D2	1000 X 2100	3	PRESSED STEEL FRAME 35 THICK SOLID CORE FLUSHED DOOR.
4	D3	800 X 2100	8	PRESSED STEEL FRAME 35 THICK SOLID CORE FLUSHED DOOR.
5	W1	1200 X 1500	7	ALUMINIUM SLIDING WINDOWS.
6	W2	1800 X 1500	10	ALUMINIUM SLIDING WINDOWS.
7	V	600 X 600	12	ALUMINIUM VENTILATOR.

SCHEDULE OF COLUMNS

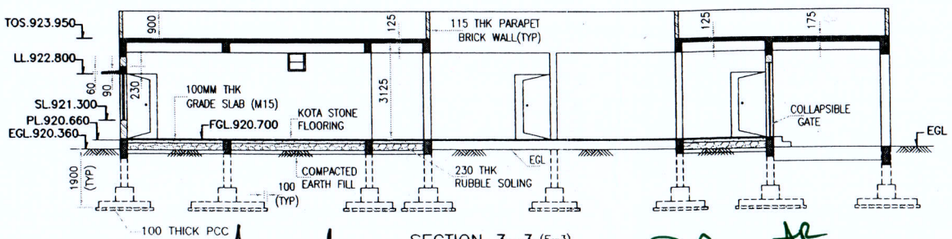
COLUMN	SIZE (mm)	TOTAL NUMBERS
C1	300 ø	2
C2	230x230	8
C3	230x300	8
C4	230x380	20
C5	230x450	2

SCHEDULE OF FOOTINGS

FOOTING	SIZE (mm)	TOTAL NUMBERS
F1	1600x1600	2
F2	1600x1600	8
F3	1700x1700	8
F4	2200x2200	9
F5	2500x2500	9
F6	2250x2250	2
F7	3600x2150	2



SECTION 2–2 (C-1) (E-5)
(SCALE 1:100)



SECTION 3–3 (E-3)
(SCALE 1:100)

RO	29-06-2010	FOR CONSTRUCTION			
ISSUE	DATE	DESCRIPTION	BY	CIV. / ELEC. / MECH. CHECKED	APPD.

BANGALORE WATER SUPPLY AND SEWERAGE BOARD

BANGALORE WATER SUPPLY AND SEWERAGE PROJECT (II)

GA OF SUB DIVISION OFFICE BUILDING PLAN, SECTIONS & FOOTING LAYOUT AT OMBR (14ML CAPACITY)

NIPPON JOGESUIDO SEKKEI Co. LTD. JAPAN
MOTT MACDONALD LTD. UK
TATA CONSULTING ENGINEERS LTD. INDIA

DESIGNED: S.R	DATE: (RO ISSUE)	29/06/2010
DRAWN: N.D	DATE: (CURRENT ISSUE)	29/06/2010
CHECKED: S.R/M.K	DIVISION:	CV
SCALE: AS SHOWN	DWG. NO. NMT/BWSSP(II)/W6b/GA/4006	ISSUE RO

APPROVED

NMT	BWSSB
(TEAM LEADER)	CE(K)

FILE NAME : NMT_BWSSP(II)_W6b_GA_4006-07 ST-4060-61-62-63-64.dwg

TITLE: GA OF SUB DIVISION OFFICE BUILDING PLAN, SECTIONS & FOOTING LAYOUT AT OMBR (14ML CAPACITY)

DWG. NO.: NMT/BWSSP(II)/W6b/GA/4006

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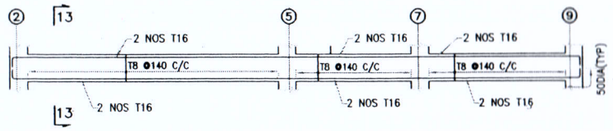
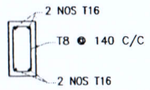
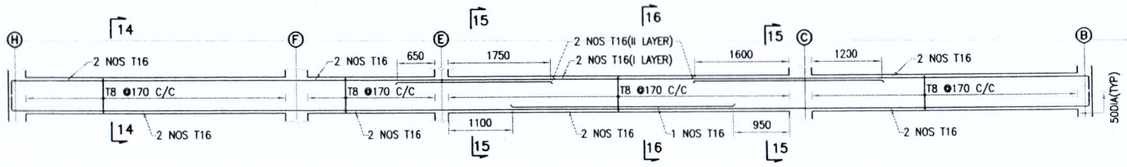


RC DETAIL OF TRB8 (230x450)
SCALE 1:50



SECTION 13–13
SCALE 1:25



RC DETAIL OF TRB9 (230x600)
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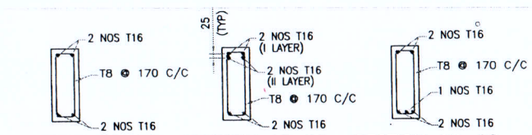
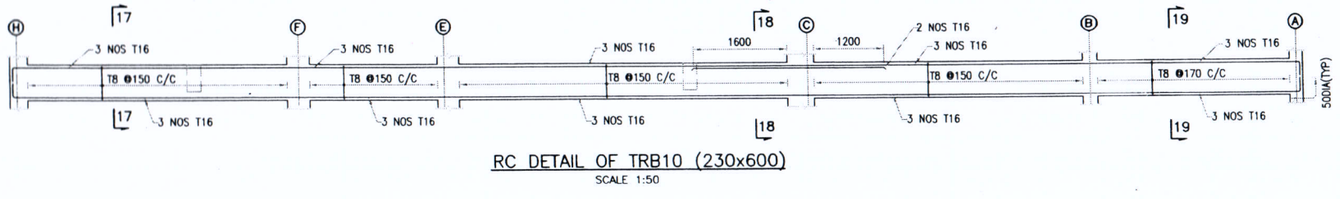


SECTION 14–14
SCALE 1:25

SECTION 15–15
SCALE 1:25

SECTION 16–16
SCALE 1:25



RC DETAIL OF TRB10 (230x600)
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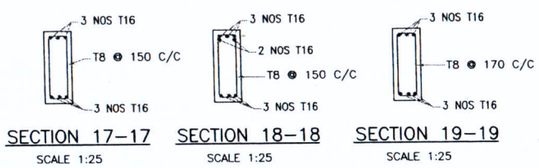


SECTION 17–17
SCALE 1:25

SECTION 18–18
SCALE 1:25

SECTION 19–19
SCALE 1:25

LEGEND

TYP – – – – – – – – – – TYPICAL

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
2. 'T' INDICATES TMT STEEL.

ENGINEERING REFERENCE DRAWINGS

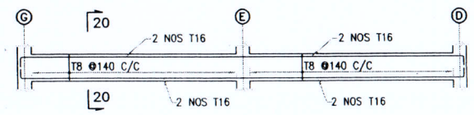
NIL

CONSTRUCTION REFERENCE DRAWINGS

OMBR CLEAR WATER RESERVOIR

DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4006

DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4007



RC DETAIL OF TRB11 (230x450)
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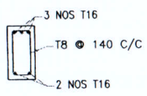

SECTION 20–20
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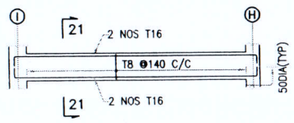
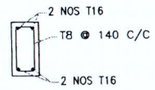


RC DETAIL OF TRB12 (230x450)
SCALE 1:50



SECTION 21–21
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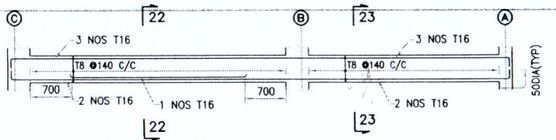

RC DETAIL OF TRB13 (230x450)
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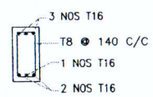

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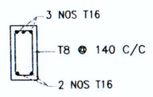
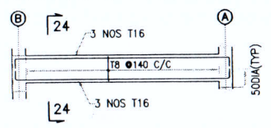
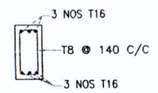
SCALE 1:25



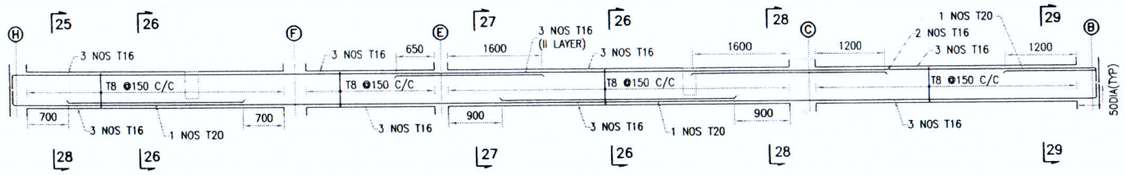
SECTION 23–23
SCALE 1:25



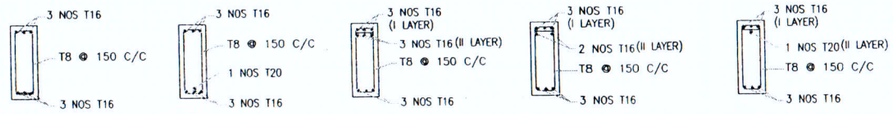
DETAIL OF TRB14 (230x450
SCALE 1:50



SECTION 24–24
SCALE 1:25



RC DETAIL OF TRB15 (230X600)
SCALE 1:50



SECTION 25–25
SCALE 1:25

SECTION 26–26
SCALE 1:25

SECTION 27–27
SCALE 1:25

SECTION 28–28
SCALE 1:25

SECTION 29–29
SCALE 1:25

R1	29–06 2010	AS SHOWN (E–4)					
R0	21–04 2010	FOR FUTURE PROPOSAL					
ISSUE	DATE	DESCRIPTION	BY	CIV.	ELEC.	MECH.	APPD.
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BANGALORE WATER SUPPLY AND SEWERAGE BOARD

BANGALORE WATER SUPPLY AND SEWERAGE PROJECT (II)

RC DETAILS FOR 1st FLOOR ROOF LEVEL BEAMS FOR SUB DIVISION OFFICE BUILDING AT OMBR (FUTURE PROPOSAL)

NIPPON JOGESUIDO SEKKEI Co. LTD. JAPAN
MOTT MACDONALD LTD. UK
TATA CONSULTING ENGINEERS LTD. INDIA

DESIGNED: S.R	DATE: (R0 ISSUE) 29/06/2010
DRAWN: N.D	DATE: (CURRENT ISSUE) 29/06/2010
CHECKED: S.R/M.K	DIVISION: CV
SCALE: AS SHOWN	DWG. NO. NMT/BWSSP(II)/W6b/ST/4066 ISSUE R0

APPROVED

NMT	BWSSB
(TEAM LEADER)	CE(K)

FILE NAME : OMBR-SUB DIVISION OFFICE FUTURE 1ST FLOOR RC.dwg

EE(MTS)

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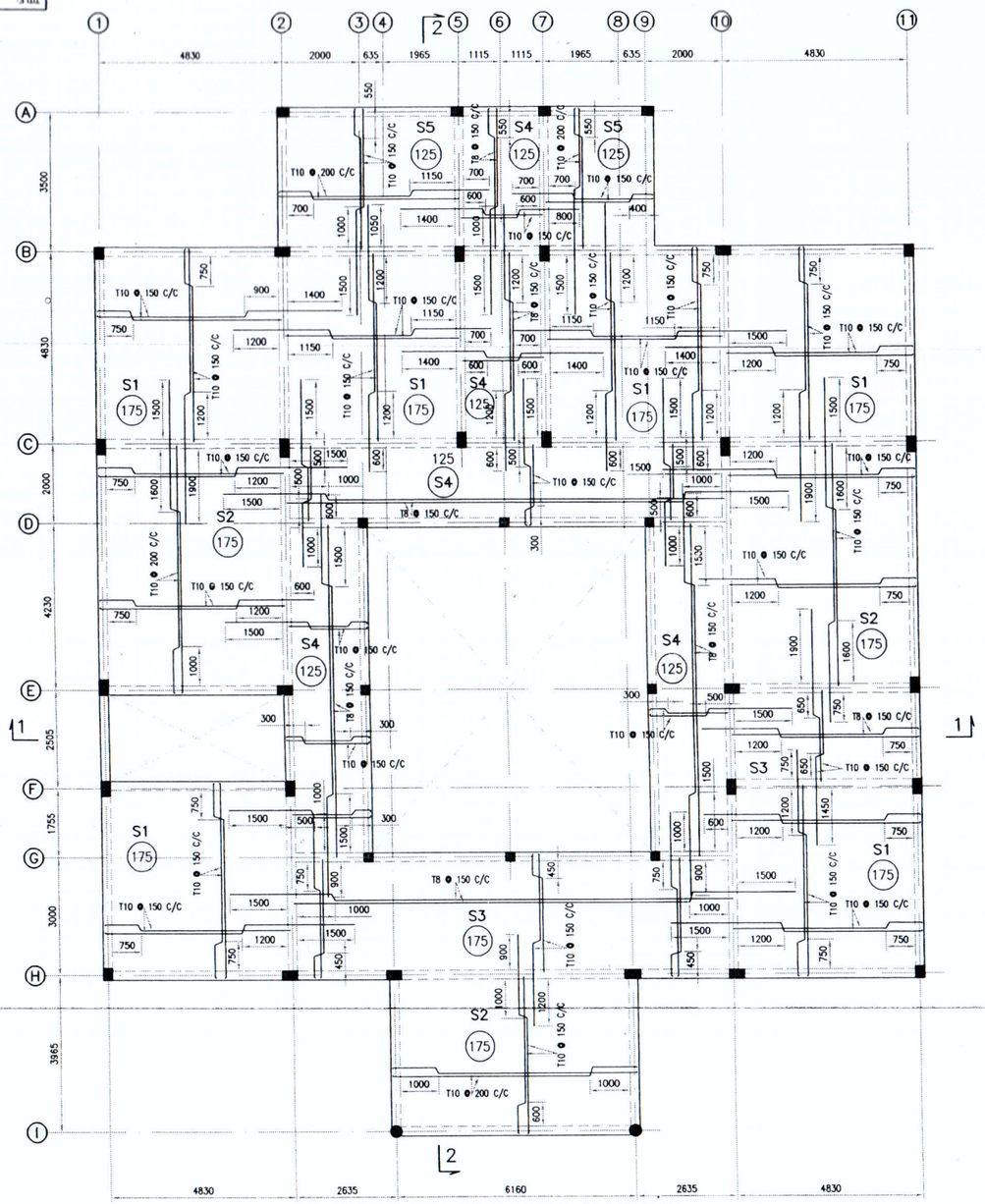
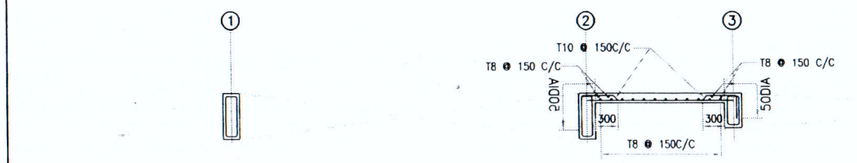
TITLE: RC DETAILS FOR 1st FLOOR ROOF SLAB FOR SUB DIVISION OFFICE BUILDING AT OMBR (FUTURE PROPOSAL)

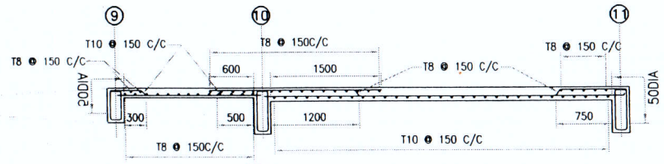
DWG. NO.: NMT/BWSSP(II)/W6b/ST/4067



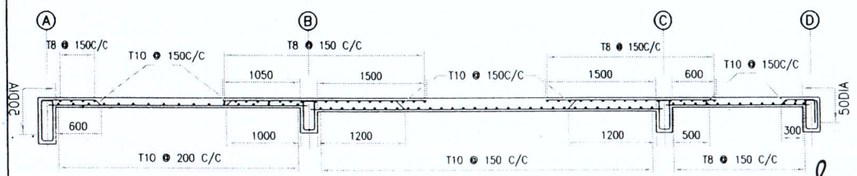
RC DETAILS FOR FIRST FLOOR ROOF SLAB

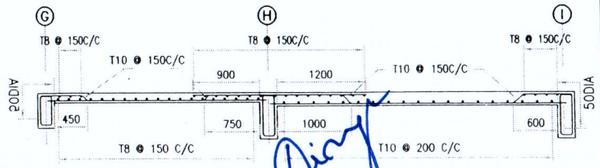
(T8 @ 150 C/C FOR TOP DISTRIBUTION NOT SHOWN FOR CLARITY)





SECTION 1-1





SECTION 2-2

AE

EE(DC&BM)-3

EE(MIS)

LEGEND

TYP ---------- TYPICAL

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
2. 'T' INDICATES TMT STEEL.

ENGINEERING REFERENCE DRAWINGS

NIL

REINFORCEMENT SCHEDULE

TYPE OF PANEL	THICKNESS OF ROOFSLAB (mm)	MAIN STEEL	DISTRIBUTION STEEL
S1	175	T10 @ 150 C/C	T10 @ 150 C/C
S2	175	T10 @ 150 C/C	T10 @ 200 C/C
S3	175	T10 @ 150 C/C	T8 @ 150 C/C
S4	125	T10 @ 150 C/C	T8 @ 150 C/C
S5	125	T10 @ 150 C/C	T10 @ 200 C/C

NOTE: T8 @ 150 C/C FOR DISTRIBUTION

CONSTRUCTION REFERENCE DRAWINGS

OMBR CLEAR WATER RESERVOIR

DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4006

DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4007

ISSUE	DATE	DESCRIPTION	BY	CHECKED: CIV.	ELEC.	MECH.	APPD.
R0	26-06-2010	FOR FUTURE PROPOSAL					

BANGALORE WATER SUPPLY AND SEWERAGE BOARD

BANGALORE WATER SUPPLY AND SEWERAGE PROJECT (II)

RC DETAILS FOR 1st FLOOR ROOF SLAB FOR SUB DIVISION OFFICE BUILDING AT OMBR (FUTURE PROPOSAL)

NIPPON JOGESUIDO SEKKEI Co. LTD. JAPAN
MOTT MACDONALD LTD. UK
TATA CONSULTING ENGINEERS LTD. INDIA

DESIGNED: S.R	DATE: (R0 ISSUE)	29/06/2010
DRAWN: N.D	DATE: (CURRENT ISSUE)	29/06/2010
CHECKED: S.R/M.K	DIVISION: CV	
SCALE: AS SHOWN	DWG. NO. NMT/BWSSP(II)/W6b/ST/4067	ISSUE R0

APPROVED

NMT	BWSSB
(TEAM LEADER)	CE(K)

FILE NAME : OMBR-SUB DIVISION OFFICE FUTURE 1ST FLOOR RC.dwg

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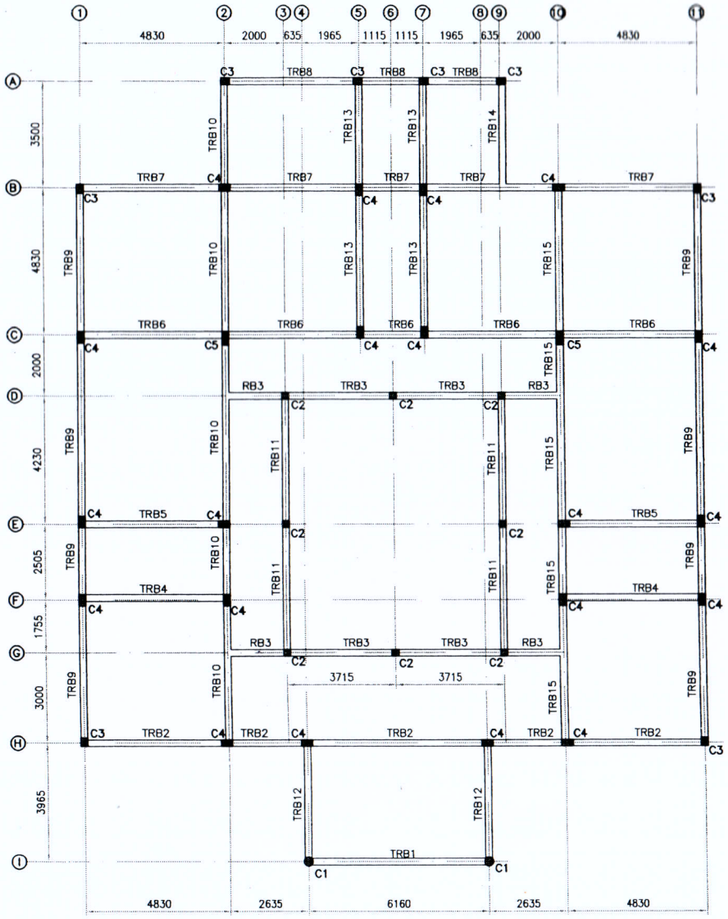
TITLE: RC DETAILS FOR 1st FLOOR ROOF LEVEL BEAMS & LAYOUT FOR SUB DIVISION OFFICE BUILDING AT OMBR (FUTURE PROPOSAL)

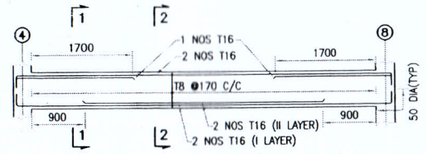
DWG. No.: NMT/BWSSP(II)/W6b/ST/4065



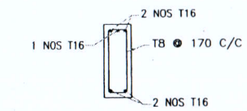
FIRST FLOOR ROOF BEAM LAYOUT

SCHEDULE OF BEAMS

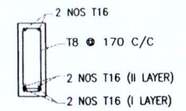
BEAM	WIDTH (mm)	DEPTH (mm)
TRB1	230	600
TRB2	230	600
TRB3	230	450
TRB4	230	450
TRB5	230	450
TRB6	230	600
TRB7	230	600
TRB8	230	450
TRB9	230	600
TRB10	230	600
TRB11	230	450
TRB12	230	450
TRB13	230	450
TRB14	230	450
TRB15	230	600



RC DETAIL OF TRB1 (230x600)
SCALE 1:50



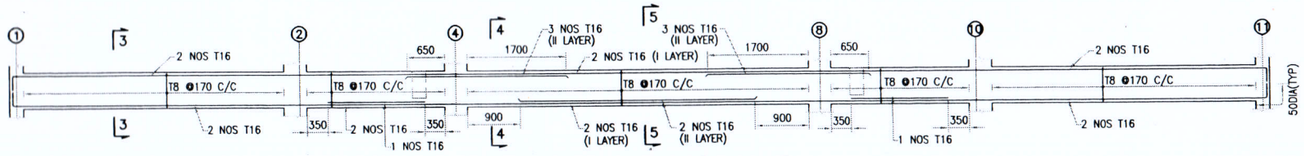
SECTION 1–1
SCALE 1:25



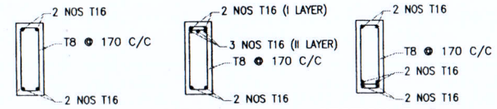
SECTION 2–2
SCALE 1:25

LEGEND

TYP – – – – – – – – – – TYPICAL



RC DETAIL OF TRB2 (230x600)
SCALE 1:50



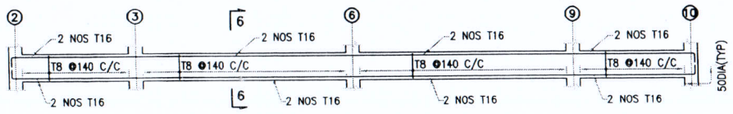
SECTION 3–3
SCALE 1:25

SECTION 4–4
SCALE 1:25

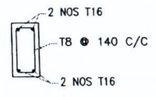
SECTION 5–5
SCALE 1:25

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
2. 'T' INDICATES TMT STEEL.



RC DETAIL OF TRB3 (230x450)
SCALE 1:50

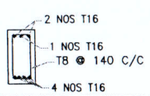


SECTION 6–6
SCALE 1:25

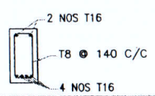
ENGINEERING REFERENCE DRAWINGS

NIL

RC DETAIL OF TRB4 & TRB5 (230x450)
SCALE 1:50



SECTION 7–7
SCALE 1:25



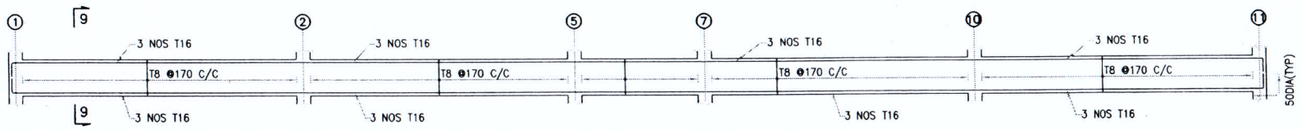
SECTION 8–8
SCALE 1:25

CONSTRUCTION REFERENCE DRAWINGS

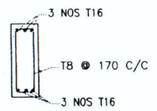
OMBR CLEAR WATER RESERVOIR

DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4006

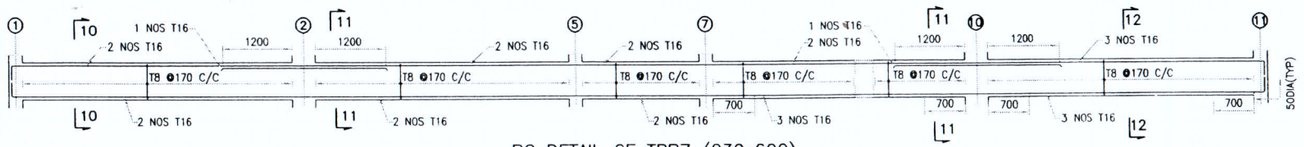
DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4007



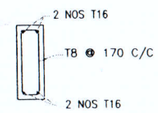
RC DETAIL OF TRB6 (230x600)
SCALE 1:50



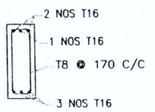
SECTION 9–9
SCALE 1:25



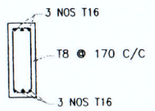
RC DETAIL OF TRB7 (230x600)
SCALE 1:50



SECTION 10–10
SCALE 1:25



SECTION 11–11
SCALE 1:25



SECTION 12–12
SCALE 1:25

R0	29-06-2010	FOR FUTURE PROPOSAL						
ISSUE	DATE	DESCRIPTION	BY	CIV.	ELEC.	MECH.	CHECKED	APPD.

BANGALORE WATER SUPPLY AND SEWERAGE BOARD

BANGALORE WATER SUPPLY AND SEWERAGE PROJECT (II)

RC DETAILS FOR Ist FLOOR ROOF LEVEL BEAMS & LAYOUT FOR SUB DIVISION OFFICE BUILDING AT OMBR (FUTURE PROPOSAL)

NIPPON JOGESUIDO SEKKEI Co. LTD. JAPAN
MOTT MACDONALD LTD. UK
TATA CONSULTING ENGINEERS LTD. INDIA

DESIGNED: S.R	DATE: (R0 ISSUE) 29/06/2010
DRAWN: N.D	DATE: (CURRENT ISSUE) 29/06/2010
CHECKED: S.R/M.K	DIVISION: CV
SCALE: AS SHOWN	DWG. NO. NMT/BWSSP(II)/W6b/ST/4065 ISSUE R0

APPROVED

NMT	BWSSB
(TEAM LEADER)	CE(K)

FILE NAME : OMBR-SUB DIVISION OFFICE FUTURE 1ST FLOOR RC.dwg

AEE(DC&BM)-3

FE(M IS)

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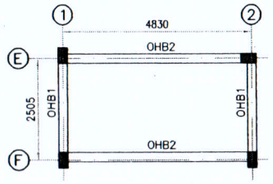
TITLE: RC DETAILS FOR OVERHEAD ROOM ROOF LEVEL BEAMS & STAIRCASE FOR SUB DIVISION OFFICE BUILDING (AT 1st FLOOR & FUTURE PROPOSAL) AT OMBR

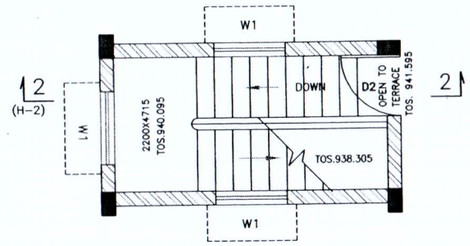
DWG. NO.: NMT/BWSSP(II)/W6b/ST/4068



BEAM	WIDTH (mm)	DEPTH (mm)
OHB1	230	450
OHB2	230	450

BEAM LAYOUT FOR STAIRCASE OVERHEAD ROOM

SCALE 1:75

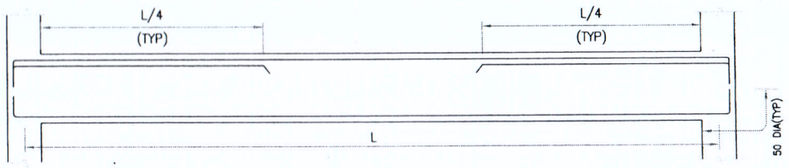


PLAN OF STAIRCASE OVERHEAD ROOM

SCALE 1:50

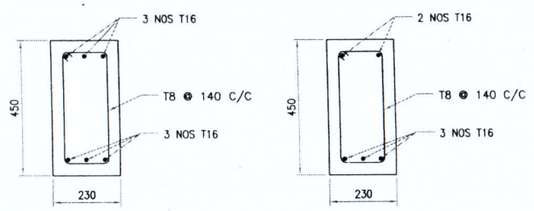
LEGEND

TYP — — — — — — — — — TYPICAL



LS OF OVERHEAD ROOM BEAM(TYPICAL)

SCALE 1:20

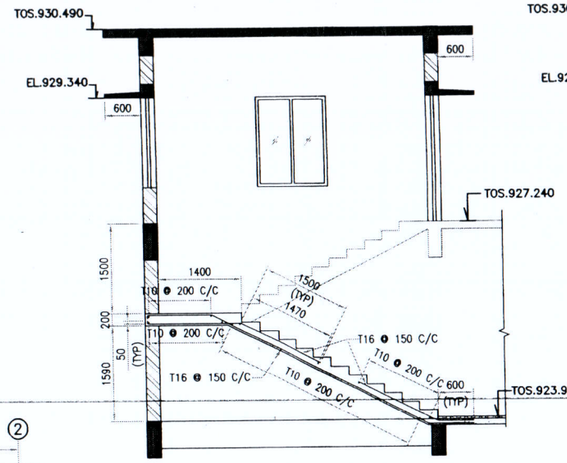


SECTION AT SUPPORT SECTION AT MIDDLE

OVERHEAD ROOM BEAM OHB1 & OHB2

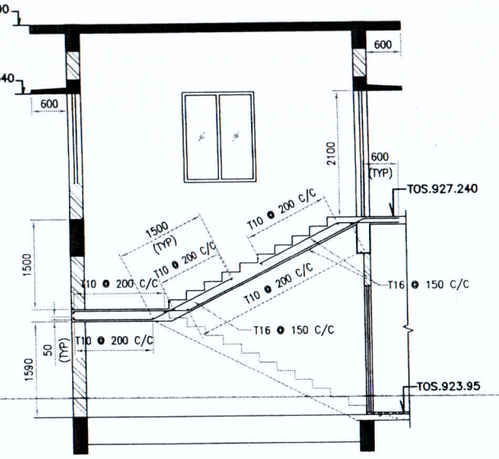
RC DETAIL OF OVERHEAD ROOM BEAMS(TYPICAL)

SCALE 1:10



SECTION A–A (C-1)

(SCALE 1:50)



SECTION B–B (C-1)

(SCALE 1:50)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
2. 'T' INDICATES TMT STEEL.

ENGINEERING REFERENCE DRAWINGS

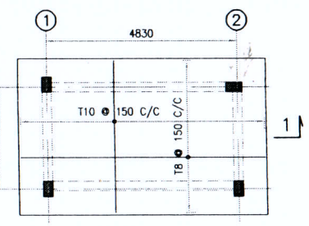
NIL

CONSTRUCTION REFERENCE DRAWINGS

JUMBU SAVARI GUDDA CLEAR WATER RESERVOIR

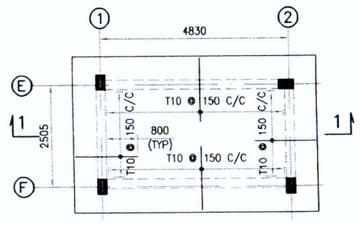
DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4006

DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4007



RC DETAILS FOR STAIRCASE OVERHEAD ROOM ROOF SLAB(BOTTOM REINFORCEMENT)

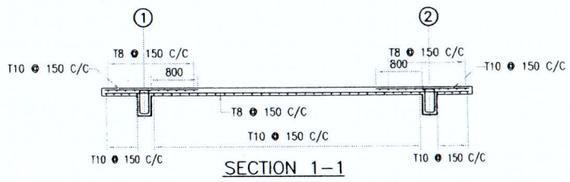
SCALE 1:75



RC DETAILS FOR STAIRCASE OVERHEAD ROOM ROOF SLAB(TOP REINFORCEMENT)

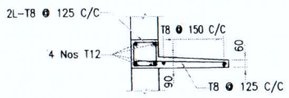
(DISTRIBUTION BARS NOT SHOWN FOR CLARITY & FOR THAT REFER SECTIONS)

SCALE 1:75



SECTION 1–1

SCALE 1:50



TYPICAL R.C DETAIL FOR CHAJJA

SCALE 1:25

R0	26-06-2010	FOR CONSTRUCTION				
ISSUE	DATE	DESCRIPTION	BY	CIV.	ELEC.	MECH. CHECKED / APPD.

BANGALORE WATER SUPPLY AND SEWERAGE BOARD

BANGALORE WATER SUPPLY AND SEWERAGE PROJECT (II)

RC DETAILS FOR OVERHEAD ROOM ROOF LEVEL BEAMS & STAIRCASE FOR SUB DIVISION OFFICE BUILDING (AT Ist FLOOR & FUTURE PROPOSAL) AT OMBR

NIPPON JOGESUIDO SEKKEI Co. LTD. JAPAN
MOTT MACDONALD LTD. UK
TATA CONSULTING ENGINEERS LTD. INDIA

DESIGNED: S.R	DATE: (R0 ISSUE)	29/06/2010
DRAWN: N.D	DATE: (CURRENT ISSUE)	29/06/2010
CHECKED: S.R/M.K	DIVISION:	CV
SCALE: AS SHOWN	DWG. NO. NMT/BWSSP(II)/W6b/ST/4068	ISSUE R0

APPROVED

NMT	BWSSB
(TEAM LEADER)	CE(K)

FILE NAME : OMBR-SUB DIVISION OFFICE FUTURE 1ST FLOOR RC.dwg

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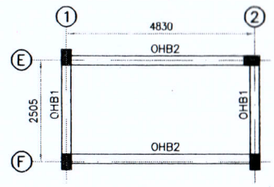
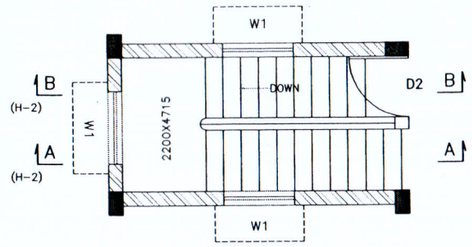


BEAM LAYOUT FOR STAIRCASE OVERHEAD ROOM

SCALE 1:75

BEAM	WIDTH (mm)	DEPTH (mm)
OHB1	230	450
OHB2	230	450



PLAN OF STAIRCASE OVERHEAD ROOM

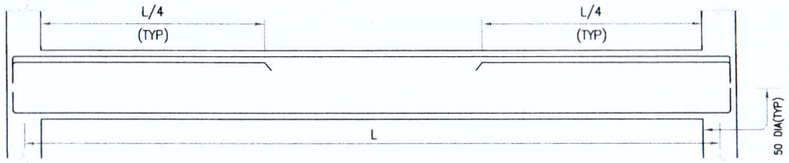
SCALE 1:50

LEGEND

TYP ---------- TYPICAL

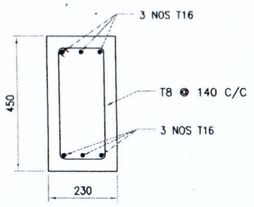
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
2. 'T' INDICATES TMT STEEL.

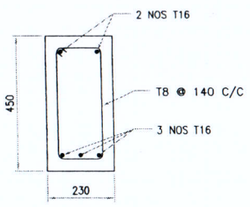


LS OF OVERHEAD ROOM BEAM(TYPICAL)

SCALE 1:20



SECTION AT SUPPORT

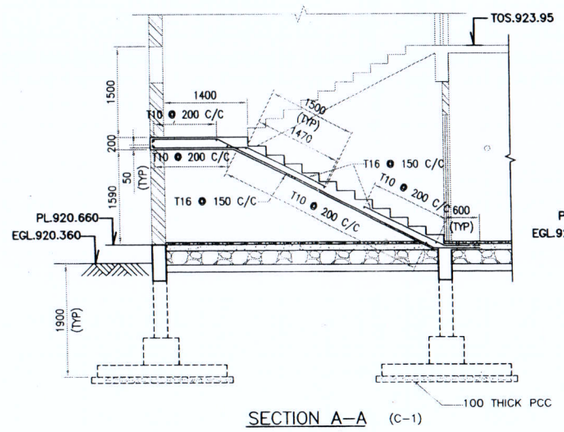


SECTION AT MIDDLE

OVERHEAD ROOM BEAM OHB1 & OHB2

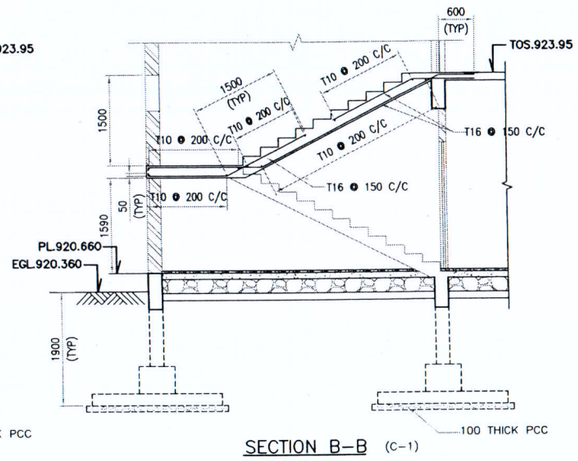
RC DETAIL OF OVERHEAD ROOM BEAMS(TYPICAL)

SCALE 1:10



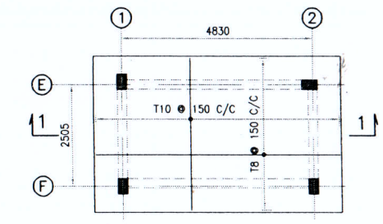
SECTION A-A (C-1)

(SCALE 1:50)



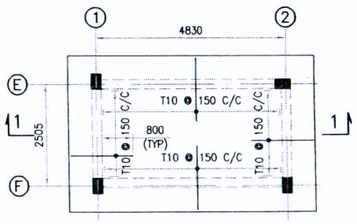
SECTION B-B (C-1)

(SCALE 1:50)



RC DETAILS FOR STAIRCASE OVERHEAD ROOM ROOF SLAB(BOTTOM REINFORCEMENT)

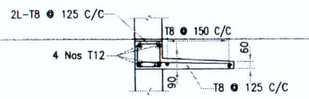
SCALE 1:75



RC DETAILS FOR STAIRCASE OVERHEAD ROOM ROOF SLAB(TOP REINFORCEMENT)

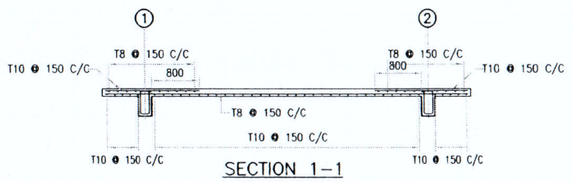
(DISTRIBUTION BARS NOT SHOWN FOR CLARITY & FOR THAT REFER SECTIONS)

SCALE 1:75



TYPICAL R.C DETAIL FOR CHAJJA

SCALE 1:25



SECTION 1-1

SCALE 1:50

ENGINEERING REFERENCE DRAWINGS

NIL

CONSTRUCTION REFERENCE DRAWINGS

OMBR CLEAR WATER RESERVOIR

DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4006

DRAWING No. ..... NMT/BWSSP(II)/W6b/GA/4007

ISSUE	DATE	DESCRIPTION	BY	CIV.	ELEC.	MECH. CHECKED	APPD.
R0	29-06-2010	FOR CONSTRUCTION					

BANGALORE WATER SUPPLY AND SEWERAGE BOARD

BANGALORE WATER SUPPLY AND SEWERAGE PROJECT (II)

RC DETAILS FOR OVERHEAD ROOM ROOF LEVEL BEAMS & STAIRCASE FOR SUB DIVISION OFFICE BUILDING AT OMBR

NIPPON JOGESUIDO SEKKEI Co. LTD. JAPAN
MOTT MACDONALD LTD. UK
TATA CONSULTING ENGINEERS LTD. INDIA

DESIGNED: S.R	DATE: (R0 ISSUE) 29/06/2010
DRAWN: N.D	DATE: (CURRENT ISSUE) 29/06/2010
CHECKED: S.R/M.K	DIVISION: CV
SCALE: AS SHOWN	DWG. NO. NMT/BWSSP(II)/W6b/ST/4064 ISSUE R0

APPROVED

NMT	BWSSB
(TEAM LEADER)	CE(K)

FILE NAME : NMT_BWSSP(II)_W6b_GA_4006-07 ST-4060-61-62-63-64.dwg

DEE(DCRBM)-3

EE(MT)

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